# Imanol Pérez Arribas

## Personal Information


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| Name | Imanol |
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| Birth date | 24/01/1994 |
| Country | Spain |
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## Education

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| 2016–Now | PhD in Mathematics at Oxford University. |
| 2012–2016 | Bachelor of Science in Mathematics at the University of the Basque Country in Spain.<br>Average grade: 9.61/10. |
| 2014–Now | Second year Physics student at Universidad Nacional de Educación a Distancia (UNED) – currently on hold. |

## Work experience

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| Oct 2019 – Now | Quantitative Researcher at J.P. Morgan in London, with the objective of exploring potential applications of my PhD to projects at the firm. |
| Jul 2019 – Sep 2019 | Quantitative Researcher Intern at Jump Trading. |
| Jan 2018 – Jun 2019 | Quantitative Researcher at J.P. Morgan in London, with the objective of exploring potential applications of my PhD to projects at the firm. |
| Jul 2017 – Sep 2017 | Quantitative Research Associate internship at J.P. Morgan in London in the Equities Derivatives team. |

## Scholarships

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| 2017 | Extraordinary Award for my Bachelor in Mathematics. Awarded by the University of the Basque Country. |
| 2016 | Full scholarship offered by the bank La Caixa for graduate studies in Europe. |
| 2016 | Scholarship from the University of Oxford that covers University and College Fees. |

## Programming languages

- Python
- R
- C++
- MATLAB

## Publications

2019 **Nonparametric pricing and hedging of exotic derivatives**.
*Terry Lyons, Sina Nejad and Imanol Perez Arribas.*
arXiv:1905.00711

2019 **Deep Signatures**.
*Patric Bonnier, Patrick Kidger, Imanol Perez Arribas, Cristopher Salvi and Terry Lyons.*
NeurIPS 2019

2019 **Optimal execution with rough path signatures**.
*Jasdeep Kalsi, Terry Lyons and Imanol Perez Arribas.*
arXiv:1905.00728

2019 **Model-free pricing and hedging in discrete time using rough path signatures**.
*Terry Lyons, Sina Nejad and Imanol Perez Arribas.*
arXiv:1905.01720

2018 **Derivatives pricing using signature payoffs**.
*Imanol Perez Arribas.*
arXiv:1809.09466

2018 **Labelling as an unsupervised learning problem**.
*Terry Lyons and Imanol Perez Arribas.*
arXiv:1805.03911

2017 **A signature-based machine learning model for bipolar disorder and borderline personality disorder**.
*Imanol Perez Arribas, Guy M. Goodwin, John R. Geddes, Terry Lyons and Kate E.A. Saunders.*
Translational Psychiatry, 8(1), p.274

## Teaching

Michaelmas Term 2017
- *Martingales Through Measure Theory* (B8.1) at the University of Oxford.
- *Measure Theory & Probability* (PDE/CDT) at the University of Oxford.
- *Numerical Solutions of Differential Equations* (B6.1) at the University of Oxford.